

**POWER AMPLIFICATION BY USING DIFFERENT FIXED POWER SUPPLY  
SIGNALS FOR THE AMPLIFIER**

**ABSTRACT**

- 5        The present invention proposes a power amplification under variable envelope excitation, wherein an original input signal at least is converted into a phase modulated signal part, at least the phase modulated signal part is fed to an input port of an amplifier unit, the input signal is amplified by dynamically selecting a fixed power supply (PSU 1, PSU 2, PSU 3) for the amplifier unit, and wherein the
- 10      amplitude content of the original input signal is reconstructed by changing dependent on the respective provided power supply a further controllable input of the amplifier unit, in particular the input power level ( $P_{in}$ ) and/or the biasing voltage ( $U_g$ ) and/or biasing current at the control input of the amplifier unit, during said step of amplifying.